

## DAMAGE ASSESSMENT AND EMERGENCY STATUS REPORT # 10

### Tuesday, June 17, 2008

(Note: This report contains the latest incident information as reported in the statewide "E Team" incident management system for the June 6-8, 2008 severe storms in central and southern Lower Michigan and the June 12-13, 2008 severe storms in central and northern Lower Michigan. Refer to Damage Assessment and Emergency Status Reports #1-9 for synopses of incident-related information for the period from June 6-16, 2008.)

**SITUATION OVERVIEW:** A series of damaging thunderstorms occurred in waves across central and southern Lower Michigan beginning on Friday, June 6 and continuing through the weekend on June 7 and 8, 2008. These storms caused widespread wind and flooding damage. On June 12 and 13, a line of severe storms came across Lake Michigan and caused wind and flooding damage in numerous central and northern Lower Michigan counties. To date, the county and/or municipal emergency management programs that have reported damage and/or impacts via the statewide "E Team" information system for one or both storm systems include:

- Allegan County
- Arenac County
- Barry County
- Clare County
- Clinton County
- Delta Township (Eaton County)
- City of Detroit
- Eaton County
- Genesee County
- Gladwin County
- Lake County
- City of Lansing
- Livingston County
- Manistee County
- Mason County
- Missaukee County
- Monroe County
- Oakland County
- Ogemaw County
- Osceola County
- Ottawa County
- Saginaw County
- Washtenaw County
- Wayne County
- Wexford County

### DAMAGE / IMPACT SUMMARIES FOR REPORTING JURISDICTIONS\*:

**\*Note: these summaries have been copied from the actual E Team Incident or Jurisdiction Situation Reports filed by the respective jurisdictions. Some editing may have occurred to clarify the information or remove extraneous information.**

#### **Allegan County:**

Updated agricultural damage figures were compiled for the county. These will be submitted to the Michigan Department of Agriculture (MDA) for review, analysis, and possible follow up action with the U. S. Department of Agriculture.

#### **Arenac County:**

Nothing new to report.

**Barry County:**

Nothing new to report.

**Clare County:**

Nothing new to report.

**Clinton County:**

Nothing new to report.

**Delta Township (Eaton County):**

Nothing new to report.

**City of Detroit:**

Nothing new to report.

**Eaton County:**

Nothing new to report.

**Genesee County:**

Nothing new to report.

**Gladwin County:**

Nothing new to report.

**Lake County:**

On June 16, Lake County officially requested a Governors Declaration for assistance in the repair of the county roadways, and for assistance to private homeowners. On June 17, Lake County amended its original request and resubmitted it to the MSP/EMHSD. Lake County continues to assess the damage to roadways and structures.

**City of Lansing:**

The City continues to work with crews from the Michigan Department of Military and Veterans Affairs (MDMVA) on debris removal efforts. Crews from the Michigan Department of Corrections (MDOC) will begin working with city and MDMVA crews on Wednesday, June 18.

**Livingston County:**

Nothing new to report.

**Manistee County:**

Nothing new to report.

**Mason County:**

Nothing new to report.

**Missaukee County:**

Nothing new to report.

**Monroe County:**

Nothing new to report.

**Oakland County:**

Nothing new to report.

**Ogemaw County:**

Nothing new to report.

**Osceola County:**

The County Road Commission estimates almost \$124,000 in costs from the June 13-14 storms and a total of \$83,000 from the June 6-8 storms. These figures do not include bridge damage, as they are unable to assess damage due to high water. The County Board supported the decision to resubmit their original request for a Governor's Declaration to include the effects of the June 13 storm. The County EOC will return to partial status in directing the response and recovery.

**Ottawa County:**

Nothing new to report.

**Saginaw County:**

Nothing new to report.

**Washtenaw County:**

Nothing new to report.

**Wayne County:**

Nothing new to report.

**Wexford County:**

Wexford County submitted a local "state of emergency" declaration under 1976 PA 390, as amended. Wexford County received reports from outside agencies that approximately 500 homes have been affected by the storms, causing a large amount of flooding damage. Public road damage is estimated at \$750,000. Damage assessment teams continue to go through the county collecting information.

**ADDITIONAL INFORMATION:**

**Power Outages:** Power outage issues have been substantially addressed by Detroit Edison, Consumers Energy, and the Lansing Board of Water and Light.

**State Response Actions:** The MSP/EMHSD has been monitoring the storm situation since the first storms occurred on June 6 and began compiling damage / impact assessment information during the weekend of June 7-8. The incident monitoring and damage / impact assessment collection and compilation effort continued into the week of June 9. The State Emergency Operations Center (SEOC) was partially activated on June 13 and has remained open since that time to monitor and address recovery issues related to the June 6-8 and June 12-13 storm systems. Agencies that have been present in the SEOC (at various times) include: Agriculture; Community Health; Environmental Quality; Military and Veterans Affairs; Natural Resources; State Police; Transportation; and the MSP/EMHSD. A FEMA Region V liaison is also present in the SEOC. From the SEOC, state officials will continue to monitor the situation and offer whatever assistance they can to meet situational needs. The MSP/EMHSD continues to monitor the situation, coordinate recovery and public information activities, and work closely with the Governor's Office and involved state agencies to provide direct assistance to local jurisdictions to address the most serious public safety and health concerns. Refer to the section of this report below titled "Critical Public Safety / Health Mission Assignments for State Agencies for the Declared Areas" for information on those current areas of emphasis.

**Local "State of Emergency" Declared under 1976 PA 390, as amended:**

- Eaton County on June 8, 2008.
- City of Lansing on June 8, 2008.
- Ottawa County on June 9, 2008.
- Delta Township (in Eaton County) on June 9, 2008.
- Allegan County on June 10, submitted on June 11, 2008.
- Saginaw County on June 11, 2008.
- Osceola County on June 11, 2008.
- Barry County on June 12, 2008.
- Lake County on June 13, 2008.
- Mason County on June 13, 2008.

- Wexford County on June 17, 2008.

**Requests by Local Jurisdiction for a Governor's Emergency / Disaster Declaration under 1976 PA 390, as amended:**

- Delta Township on June 9, 2008. (No specific request for state resources.)
- City of Lansing on June 10, 2008. (Request for resources included: 1) 15 forestry task force crews with minimum of five personnel each trained in tree removal with necessary equipment; 2) 10 two-person damage assessment field teams; 3) four utility line crews for utility restoration purposes; 4) three dump trucks with personnel; and 5) one end loader with grab bucket, with personnel.)
- Saginaw County on June 11, 2008. (Request for assistance with debris removal and any financial assistance that may be available.)
- Osceola County on June 11, 2008. (Request for assistance with extensive debris removal and with emergency protective measures.)
- Allegan County on June 11, 2008. (Request for: 1) assistance to supplement local response and recovery efforts in rebuilding a roadway which is the primary access for 14 residences; 2) fix and repair culverts and public drains that have been destroyed; and 3) support citizens with flooded homes.)
- Eaton County on June 12, 2008. (Request funding for debris removal; funding or assistance for road repair; and funding for responder overtime costs.)
- Ottawa County on June 13, 2008. (Request for resource and relief assistance necessary to respond to the situation.)
- Lake County on June 16, 2008. (Request funding for the rebuilding of the Lake County road system; public assistance for property owners that were affected.)
- Wexford County on June 17, 2008. (Request assistance with road repairs in any manner available, construction supplies, technical assistance, and any other help available.)

As indicated in the following section, several of these requests have been addressed. The remaining requests are being evaluated to determine the feasibility of using state agency assets to address the specific public safety and health risks described in the request.

**Governor's Declarations under 1976 PA 390, as amended:**

On June 13, Governor Granholm signed five separate "state of emergency" proclamations to mobilize direct state resources to assist the following affected local jurisdictions with their most serious health and safety concerns:

- Mason County to provide resources to address the numerous road washouts that occurred in the county due to the June 12-13 storms.
- Allegan County to provide resources to address road washouts that occurred in the county due to the June 6-8 storms.
- Eaton County to provide resources to address road washouts that occurred in the county due to the June 6-8 storms.
- The City of Lansing in Ingham County to provide resources to address lingering, serious public health and safety concerns related to the large volume of vegetative debris remaining within public roadway rights-of-way and on sidewalks and in public alleyways.
- The City of Saginaw in Saginaw County to provide resources to address lingering, serious public health and safety concerns related to the large volume of vegetative debris remaining within public roadway rights-of-way and on sidewalks and in public alleyways.

**Critical Public Safety / Health Mission Assignments for State Agencies for the Declared Areas:**

On Saturday, June 14, at 8:00 AM, a telephone conference call was held between SEOC staff and representatives of the five jurisdictions included in the Governor's "state of emergency" proclamations referenced above. The purpose of this call was to identify the most critical public safety / health mission assignments for state agencies so that timely direct assistance can be provided to the declared areas. Following is a synopsis of the most critical problems and assistance needs identified in that call:

Declared Jurisdiction	Primary Problems	Type of Assistance Requested	Potentially Responsible State Agency*
Allegan County	<ul style="list-style-type: none"> <li>• Clogged public drains</li> <li>• Road / culvert washouts</li> <li>• Water quality (e-Coli)</li> </ul>	<ul style="list-style-type: none"> <li>• Drain inspectors</li> <li>• Technical engineering expertise for road rebuilding</li> </ul>	<ul style="list-style-type: none"> <li>• Dept. of Agriculture (drain inspections)</li> <li>• Dept. of Transportation</li> </ul>

	<ul style="list-style-type: none"> <li>contamination)</li> <li>Fire protection access</li> <li>Storm sewer backups in Holland</li> </ul>	<ul style="list-style-type: none"> <li>\$ for water quality sampling and lab analysis costs</li> <li>Technical engineering expertise for design of temporary road for Lakeshore Drive residents</li> </ul>	<ul style="list-style-type: none"> <li>(technical engineering expertise for road rebuilding)</li> <li>Dept. of Environmental Quality; Dept. of Community Health (water quality sampling / lab analysis issues)</li> </ul>
Lansing, City of	<ul style="list-style-type: none"> <li>Removal of hazardous debris</li> </ul>	<ul style="list-style-type: none"> <li>Debris management task force resources previously requested</li> <li>Trucks for hauling debris</li> </ul>	<ul style="list-style-type: none"> <li>Depts. of Transportation; Military and Veterans Affairs; Natural Resources; Corrections (trucks and debris removal personnel)</li> </ul>
Eaton County (incl. Delta Twp.)	<ul style="list-style-type: none"> <li>Removal of hazardous debris</li> <li>Road / culvert washouts in rural areas</li> <li>Burning of destroyed barns / other outbuildings</li> </ul>	<ul style="list-style-type: none"> <li>Trucks for hauling debris</li> <li>Fill / gravel and trucks to assist in repairing roads</li> </ul>	<ul style="list-style-type: none"> <li>Depts. of Transportation; Military and Veterans Affairs; Natural Resources; Corrections (trucks and debris removal personnel)</li> <li>Dept. of Transportation (fill / gravel; technical assistance)</li> <li>Dept. of Environmental Quality (disaster debris environmental regulation waivers)</li> </ul>
Mason County	<ul style="list-style-type: none"> <li>Road / culvert washouts</li> <li>Sewer line break</li> <li>Removal of hazardous debris</li> <li>Public harbor is clogged with debris</li> <li>Damage to uninsured homes</li> <li>Potential dam breach</li> </ul>	<ul style="list-style-type: none"> <li>Equipment to assist in road rebuilding</li> <li>Assistance with access / traffic control</li> <li>Water quality sampling and lab analysis (for surface water and private wells)</li> <li>Removal of hazardous debris</li> <li>Dredging assistance for public harbor</li> <li>Low interest home loans</li> <li>Monitoring of Hamlin Lake Dam overflows / structural integrity</li> </ul>	<ul style="list-style-type: none"> <li>Dept. of Transportation (equipment / personnel for road rebuilding)</li> <li>Dept. of State Police; Dept. of Military and Veterans Affairs (access / traffic control)</li> <li>Dept. of Environmental Quality; Dept. of Community Health (water quality sampling / lab analysis issues)</li> <li>Depts. Of Transportation; Military and Veterans Affairs; Natural Resources; Corrections (trucks and debris removal personnel)</li> <li>Dept. of Environmental Quality and U.S. Army Corps of Engineers / U.S. Natural Resource Conservation Service (harbor dredging issues)</li> <li>MSP/EMHSD and U.S. Small Business Administration (uninsured home damage)</li> <li>Dept. of Natural Resources; Dept. of Environmental Quality (dam inspection / monitoring)</li> </ul>
Saginaw, City of	<ul style="list-style-type: none"> <li>Removal of hazardous debris</li> <li>Clogged public drains</li> </ul>	<ul style="list-style-type: none"> <li>Trucks / equipment / personnel to remove debris</li> <li>(No specific assistance requested re: public drains)</li> </ul>	<ul style="list-style-type: none"> <li>Depts. Of Transportation; Military and Veterans Affairs; Natural Resources; Corrections (trucks and debris removal personnel)</li> </ul>

\*Note: this is not an actual assignment of responsibilities but rather an identification of potential state agencies that could provide the requested assistance based on their day-to-day mission. Actual assignments will be made through the SEOC based on agency availability, appropriateness of the requested assistance, and other factors.

**Organizational Meeting for Implementation of Mission Assignments:** On Monday, June 16, at 9:00 AM, a briefing and organizational meeting was held in the SEOC with the involved state agencies to provide the latest incident information and to further define specific mission assignments for work in the five declared areas. Each agency provided an update on its mission-related activities as well as the agency assets that are available for its assigned missions. At 4:00 PM each day, a state agency briefing is held in the SEOC to discuss progress made throughout the day. Following are brief synopses of the agency discussions for June 17:

- Michigan Dept. of Agriculture:** The MDA intercounty drain inspectors are in contact with the Allegan County Drain Commissioner and will be developing a plan of action for providing state assistance with drain inspection activities. The MDA also submitted a request to the U.S. Department of Agriculture (USDA) to make an Emergency Physical Loss Declaration for the purpose of making emergency physical loss loans available to 31 Michigan counties that suffered physical damage from the tornadoes, hail and high winds that occurred from June 6-15, 2008.

- **Michigan Dept. of Corrections:** The MDOC has three work crews (app. 15-20 inmates) that will be providing debris removal assistance in the City of Lansing through Friday, June 20. The MDOC crews will work with City of Lansing and MDMVA work crews in clearing debris in the eastern part of the city.
- **Michigan Dept. of Environmental Quality:** The MDEQ dam safety staff inspected both the Hamlin Lake Dam and the Farwell Dam and found them to be structurally sound. They continue to monitor both dams in conjunction with local officials (and in the case of the Hamlin Lake Dam, the Michigan Dept. of Natural Resources). The MDEQ is evaluating assistance options for water sampling and laboratory analysis services in Allegan, Mason, and Ottawa counties.
- **Michigan Dept. of Military and Veterans Affairs:** The MDMVA has debris removal work crews and equipment in the City of Lansing and is assisting city crews in addressing the debris situations that pose the greatest risk to public safety and health. The MDMVA work crews are scheduled to work in the city through Friday, June 20. Three work crews from the MDOC will be working with the city and MDMVA work crews on debris removal through Friday.
- **Michigan Dept. of Natural Resources:** The MDNR continues to monitor conditions at Ludington State Park, which reopened on the afternoon of June 16. In addition, the MDNR has provided work crews and equipment to the City of Saginaw to assist with debris removal activities.
- **Michigan Dept. of State Police:** The MSP mission in Mason County ended on the evening of June 16. No further missions have been assigned.
- **Michigan Dept. of Transportation:** The MDOT continues to assist in Eaton and Mason counties with repairs to road washouts and road / bridge / culvert damage assessments. In the City of Saginaw, the MDOT is providing debris removal assistance on the state trunk lines located within the city limits. In Mason County, the US-31 rebuilding project has been completed and the roadway has been reopened to traffic.
- **MSP/EMHSD:** The MSP/EMHSD has provided involved state agencies with a cost tracking spreadsheet and continues to compile the cost data provided by the agencies. The MSP/EMHSD continues to provide field guidance to the MDMVA work crews regarding what constitutes the most serious debris-related public safety and health risks in the city. That same technical field assistance will be extended to the MDOC work crews when they begin their assistance activities in the City of Lansing on Wednesday, June 18. Today, June 17, the MSP/EMHSD provided additional written guidance to affected local jurisdictions, asking that they reevaluate their public damage costs and provide final figures to the MSP/EMHSD by the close of business on Wednesday, June 18. In addition, the MSP/EMHSD evaluated four outstanding requests for a Governor's Declaration under 1976 PA 390, as amended, and will make specific recommendations to the Governor's Office regarding these requests on Wednesday, June 18. The MSP/EMHSD also continues to address a number of media inquiries regarding the status of the storm recovery efforts.
- **FEMA / U.S. Army Corp of Engineers:** FEMA and the USACE have been coordinating with Mason County / City of Ludington officials regarding the issue of silt and other debris clogging the Ludington public harbor and possibly impacting navigational capabilities. It has been suggested that a harbor / channel dredging project may be required to fully restore navigational capabilities. The USACE has separate emergency authority to implement such a project, absent a federal emergency / major disaster declaration, if the silt / debris negatively impacts navigation. The USACE will follow up with local officials in the coming days to determine the feasibility for a harbor / dredging project.

The assistance activities listed above will be carried out during the week of June 16-20 (and beyond if necessary).

### **Storm Related Fatalities**

There are six confirmed fatalities resulting from the severe weather on June 6-8, 2008. Three fatalities in Ottawa County, two fatalities in Allegan County, and one fatality in Delta Township (Eaton County). There are two fatalities confirmed in Argentine Township (Genesee County) on June 9 as a result of carbon monoxide poisoning from a generator located in the home used during an electricity outage.

A vehicle submerged in the Thornapple River in Kent County on June 13 resulted in one fatality. Reports indicate the car went into the river and traveled about 200 yards downstream from where it left the road. There is a strong current in the river due to increased water levels from recent rain.

**Public Damage Summary Table (from filed E Team reports only):** Blank spaces indicate either no damage or damage not yet reported.

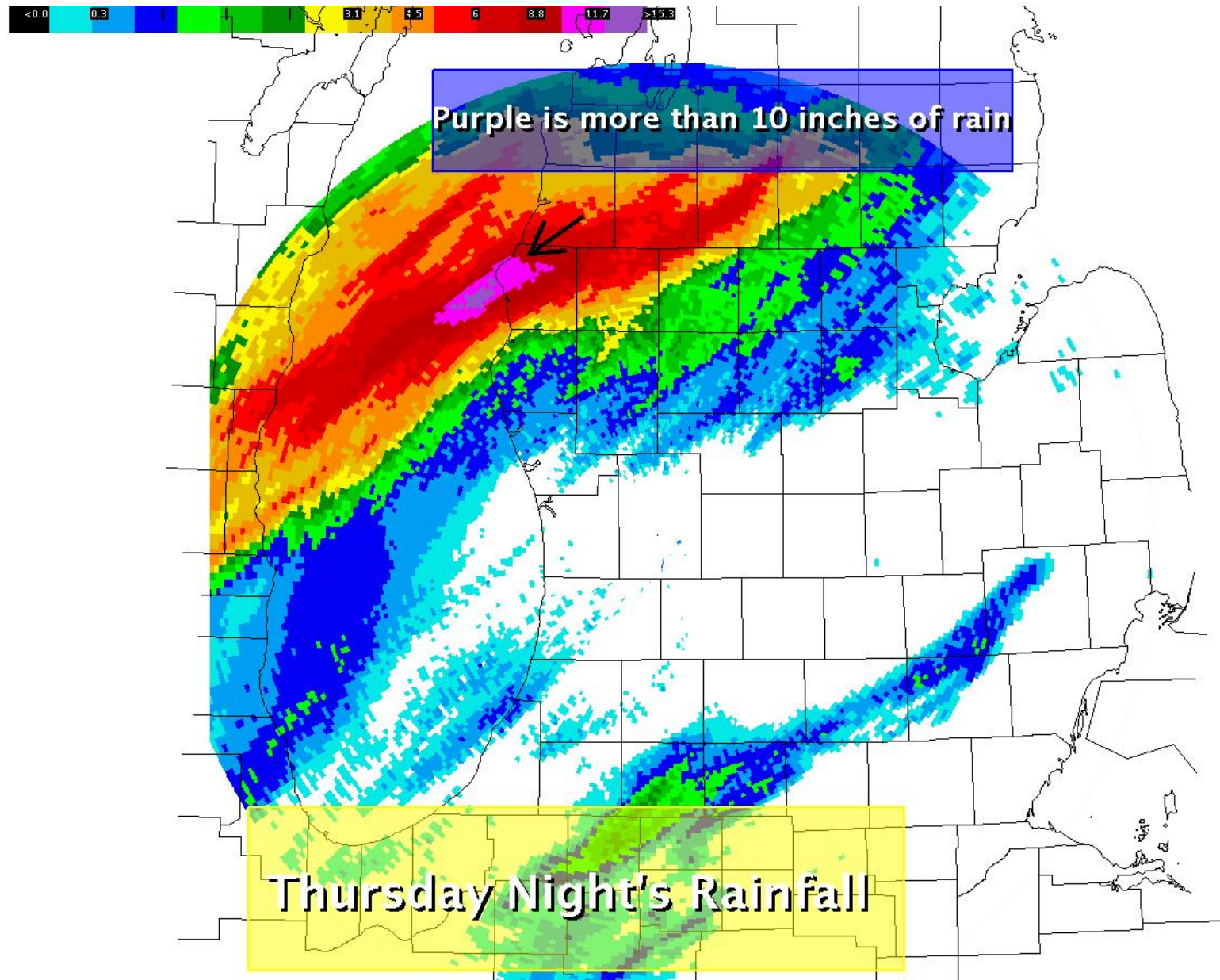
Jurisdiction	Category A: Debris Removal \$	Category B: Emer Prot Measure \$	Category C: Roads / Bridges \$	Category D: Water Control \$	Category E: Public Bldgs \$	Category F: Public Utilities \$	Category G: Parks / Rec and Other \$	\$ Estimate for Damage (per jurisdiction; total = for all jurisdictions)
Allegan County	10,000		690,000	74,600				774,600
Arenac County								
Barry County	250,000		250,000				10,000	510,000
Clare County								
Clinton County	50,000				50,000			100,000
Delta Township	97,000	101,500	25,000		2,500			226,000
City of Detroit								
Eaton County	200,000	70,000	300,000					570,000
Genesee County								
Gladwin County								
Lake County			400,000					400,000
City of Lansing	1,500,000				5,000,000	3,000,000	500,000	10,000,000
Livingston County								
Manistee County								
Mason County	15,000	145,220	3,230,000			204,500		3,594,720
Missaukee County								
Monroe County								
Oakland County								
Ogemaw County								
Osceola County	9,680	71,829	124,847					206,356
Ottawa County		290,000	429,843	418,000	70,000	312,000		1,519,943
Saginaw County	305,000							305,000
Washtenaw County								
Wayne County								
Wexford County			750,000					750,000
<b>TOTALS PER CATEGORY:</b>	<b>2,436,680</b>	<b>678,549</b>	<b>6,199,690</b>	<b>492,600</b>	<b>5,122,500</b>	<b>3,516,600</b>	<b>510,000</b>	<b>18,956,619</b>

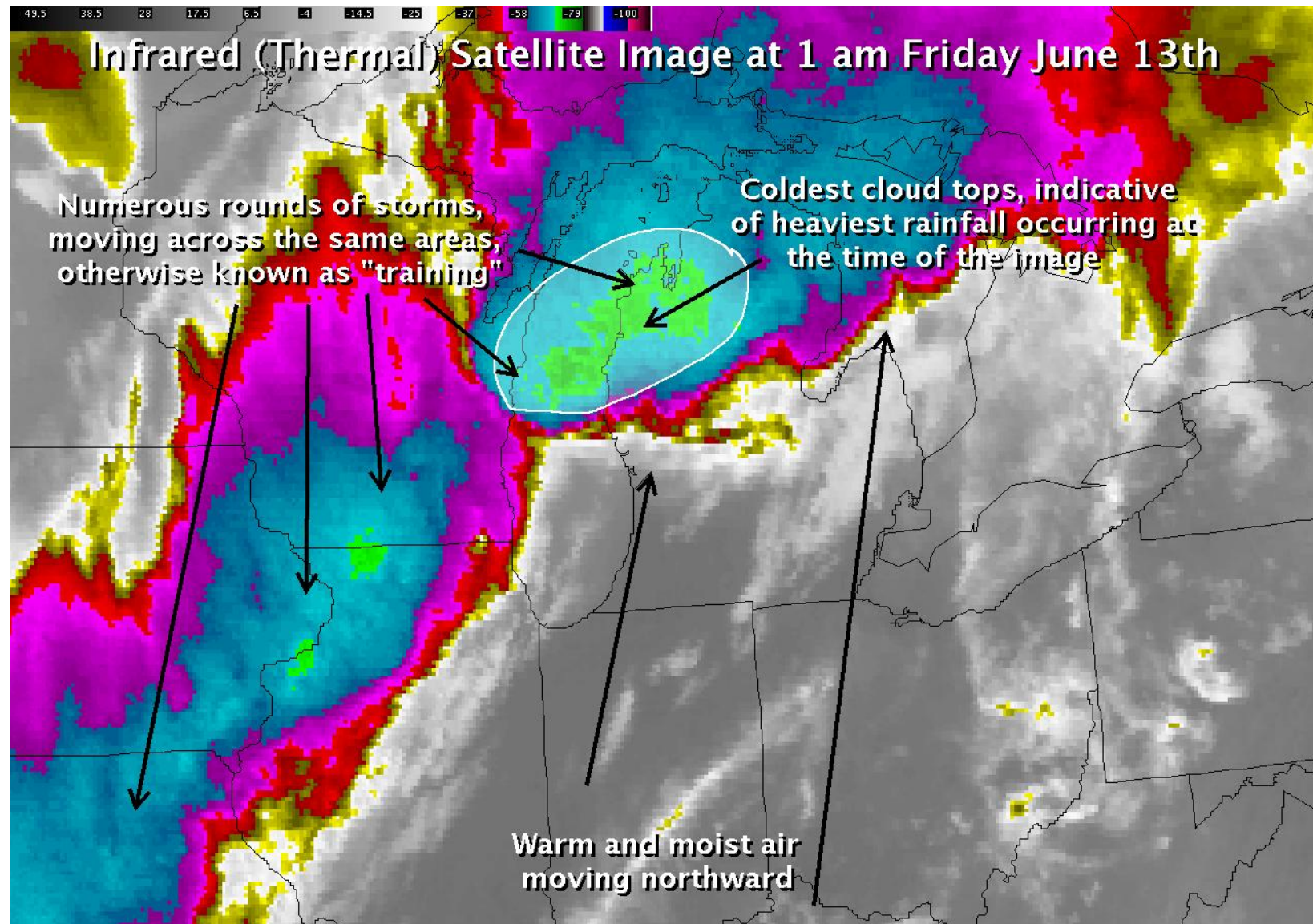


**Private Damage Summary Table (from filed E Team reports only):** Blank spaces indicate either no damage or damage not yet reported.

Jurisdiction	Residences Destroyed	Residences – Major Damage	Residences – Minor Damage	Residences – Affected	Businesses Destroyed	Businesses – Major Damage	Businesses – Minor Damage	Businesses – Affected	\$ Estimate for Damage (if available)
Allegan County		1	18	49					(5% insured)
Arenac County									
Barry County		1	19						\$180,000 (75% insured)
Clare County			7						\$10,000 (100% insured)
Clinton County	1	2	15	5			1	5	\$510,000 (100% insured)
Delta Township		1	125	300		1	5	25	\$1,300,000 (95-100% insured)
City of Detroit									
Eaton County			40	9			1		\$449,000 (100% insured)
Genesee County		1		2					(100% insured)
Gladwin County									
Lake County									
City of Lansing		9	51	285		1	1	20	\$550,000 (70% insured – residences; 100% insured – businesses)
Livingston County									
Mason County		17	50	76				10	\$909,500 (10% insured)
Missaukee County									
Monroe County									
Oakland County									
Ogemaw County			1	1					(100% insured)
Osceola County			15	130			3		
Ottawa County		2	39	220			8	3	\$1,415,000 (5% insured)
Saginaw County		8	5	16		1	1	2	(60% insured – residences; \$200,000 for businesses – 80% insured)
Washtenaw County									
Wayne County									
Wexford County									
<b>TOTALS:</b>	<b>1</b>	<b>42</b>	<b>385</b>	<b>1093</b>		<b>3</b>	<b>20</b>	<b>65</b>	<b>\$6,285,000</b>

# National Weather Service Rainfall Map for June 12-13 Storm







Enlarged National Weather Service Rainfall Map for June 12-13 Storm

